1

11-9-04

PTO/SB/21 (03-03) Approved for use through 04/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE der the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. 10/636,038 August 6, 2003

Date

Application Number TRANSMITTAL Filing Date **FORM** First Named Inventor Gurtej Sandhu Art Unit (to be used for all correspondence after initial filing) 2812 Examiner Name Unkonwn Attorney Docket Number MI22-2194 Total Number of Pages in This Submission

ENCLOSURES (Check all that apply)									
	Fee Transmittal Form	Drawing(s) After Allowance Communication to a Technology Center (TC)							
	Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53	Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Address Terminal Disclaimer Request for Refund CD, Number of CD(s) Remarks Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please Identify below): Return Receipt Postcard; Form PTO-1449; Cited References EV 3 7 2 4 6 7 8 6 4							
	SIGNA	TURE OF APPLICANT, ATTORNEY, OR AGENT							
Firm Mark S. Matkin, Reg No. 3 or Wells St. John, P.S.		2,268							
Signa	ture	- mi							
Date		11/8/04							
	CERTIFICATE OF TRANSMISSION/MAILING								

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as

expres 3 in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date:

Jim Tidrick

Typed or printed

Signature

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No	
Filing Date	
Inventor	
Assignee	Micron Technology, Inc.
Group Art Unit	
Examiner	Unknown
Attorney's Docket No	Ml22-2194
Title: Methods of Forming Material on a Substrat	te and a Method of Forming a
Field Effect Transistor Gate Oxide on a Substrate	9

INFORMATION DISCLOSURE STATEMENT

References - See Attached Form PTO-1449

To:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Ey372467864

From:

(Tel. 509-624-4276; Fax 509-838-3424)

Wells St. John P.S.

601 W. First Avenue, Suite 1300

Spokane, WA 99201-3828

Dear Sir:

The Examiner's attention is directed to the references which are listed on the attached Form PTO-1449 and copies of which are attached.

This Information Disclosure Statement is being filed within three months of the filing date of the application or before the mailing of a first Office Action, whichever occurs last. Therefore, no fee is believed to be required. However, in the event that a fee is required for filing this Information Disclosure Statement, please charge the fee specified under 37 C.F.R. §1.17(p) to Deposit Account No.

23-0925. Please credit Deposit Account No. 23-0925 with any overpayment of the above fee.

Citations of these references are respectfully requested.

Respectfully submitted,

Dated: /

By

Mark S. Matkin

Reg. No. 32,268

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)

ATTY. DOCKET NO.	SERIAL NO.
MI22-2194	10/636,038
APPLICANT Gurtej Sandhu	
FILING DATE	GROUP
August 6, 2003	2812

TAY MAN	OF THE PERSON NAMED IN			U.S. PATENT DOCUMEN'IS			
•Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	6,495,436	12/17/2002	Ahn et al.			
	AB	6,762,114	7/13/2004	Chambers			
	AC	6,717,226	4/6/2004	Hedge et al.		,	
	AD	6,608,378	8/19/2003	Ahn et al.			
	AE	6,579,767	6/17/2003	Park et al.			
	AF	6,524,918	2/25/2003	Park et al.			
	AG	2004/0023462	2/5/2004	Rotondaro et al.			
	ΑΉ	2003/0232506	12/18/2003	Metzner et al. E v 3	7244	7 g	44
	AI	2001/0029092	10/11/2003	Park et al.	4 - 0	- 0	<u> </u>
	AJ	2001/0024860	9/27/2001	Park et al.			
	AK					•	
	AL						
			F	OREIGN PATENT DOCUMENTS	!		<u> </u>
		Document Number	Date	Country	Class	Subclass	Translation Yes No
	AM						
	AN						
	AO						
	AP						
	ΑQ						
٠			OTHER REFERENCE	ES (including Author, Title, Date, Pertinent Pages, Etc.))		
	AR	"Surface preparation pp. 326-331.	and post thermal treatmen	at effects on interface properties of thin $\Lambda L_2 O_3$ films dep	osited by ALD ;" Chang	g et al.; Microele	etronic Engineering 72, 2004
	AS	"Effect Purge time 2004; pp. 2-8.	on the properties of HfO_2 f	ltms prepared by atomic layer deposition;" Kawahara et al	.: IELEEJ Transactions	on Electronics: \	Vol. E87-C, No. 1; January
	АΤ			etrics: a comparison of ALCVD and MOCVD as deposition oc. Symposium Proceedings Vol. 765); April 22-24, 2003;		x et al.; CMOS F	Pront-End materials and
EXAMINER		DATE CONSIDER	ED				

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. MI22-2194	SERIAL NO. 10/636,038	
APPLICANT Gurtej Sandhu	_	
FILING DATE	GROUP	

LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)

					FILING DATE August 6, 2003		GROU 2812	JP .	
				U.S. PATENT DOCUMENTS					
*Examiner Initial		Document Number	Date	Name		Class	Subclass	Filing If Appr	Date opriate
	AA								
	AB								
	AC			·					
	AD	_							
	AE								
	AF								
	AG							_	
	AH			Е	v 3 7 2	ΛL	7 0	LA	
	AI			E	1012	70	10	07	
	AJ								
	AK								
	AL						- <u> </u>		
			Pi	OREIGN PATENT DOCUMENTS					
į		Document Number	Date	Country		Class	Subclass	Translation	
		<u> </u>			· · · · · · · · · · · · · · · · · · ·			Yes	No
	AM					-			
	AN								
_ ·	AO AP								•
	AQ		<u> </u>	· - · · · · · · · · · · · · · · · · · · ·					
	ng		OTHER REFERENC	ES (including Author, Title, Date, Pe	ertinent Pages, Etc.)	· · · · · · · · · · · · · · · · · · ·			
	AR "Effect of Hf sources, oxidizing agents, and NH ₃ /Ar plasma on the properties of HfAIO, films prepared by atomic layer deposition;' Kawahara et al.; Japanese Journal of Applied Physics, Vol. 43, No. 7A; July 2004; pp. 4129-4134.							nal of	
	AS	"Characterization of ult 2003; pp. 272-275.	ra-thin HfO ₂ gate oxide	prepared by using atomic layer deposi	ition;" Tacho et al.; Journal	of the Korean I	Physical Society,	Vol. 42, No. 2; Fo	ebruary
	•								
_	AT								_
EXAMINER DATE CONSIDERED									
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of									

this form with next communication to applicant.